



Earth Science Enterprise

2004

Education Catalog



The NASA Vision

*To improve life here,
To extend life to there,
To find life beyond.*

The NASA Mission

*To understand and protect our home planet,
To explore the universe and search for life,
To inspire the next generation of explorers
...as only NASA can.*

NASA's Earth Science Enterprise (ESE) uses the compelling context of Earth system science to engage students in the process of scientific inquiry, helping them to achieve in science, technology, engineering and mathematics (STEM) while developing a deeper understanding of the complexities of the Earth system. The interdisciplinary field of Earth system science explores interactions among the major Earth components—continents, oceans, atmosphere, ice and life—in pursuit of answers to the fundamental question, “How is the Earth system changing and what are the consequences for life on Earth?” The knowledge acquired from understanding, characterizing and predicting Earth system change is extended to assist decision makers in such critical areas as public health, aviation safety, air quality and coastal management. Beyond our own world, what we learn about the Earth system is helping NASA explore the universe and search for life. The scientific knowledge we gain about our living planet and the technologies developed to explore Earth shape our approach to exploring other worlds.

The ESE Education Program captures and communicates the excitement of ESE activities in Earth system

science to inspire and motivate students to pursue STEM careers and to effectively translate and deliver ESE research results to the public. Through the development of the workforce pipeline and increased scientific literacy of the public, the ESE Education Program contributes to NASA's education mission by **inspiring the next generation of Earth explorers**. NASA Earth Explorers (earth.nasa.gov/education/explorers) are all ages, with a variety of backgrounds and interests, sharing a curiosity about how the Earth works and the impact Earth system processes have on sustaining life on Earth for current and future generations.

The ESE Education Program offers a diverse array of programs and resources for formal classroom instruction, informal education, and professional and workforce development. The complete listing of ESE education programs, products and resources, along with agency-wide resources for educators, is provided in this online catalog. The **Elementary & Secondary**, **Higher Education**, and **Informal Education** sections feature regional and national programs. **Products & Resources** identifies ESE products and resources for these three educational communities. Products and resources included in this catalog have passed the ESE Education Product Review (earth.nasa.gov/education/esereview), an independent peer review that ensures ESE education products are of high quality and meet science education standards. Agency-wide resources for educators are identified in the **NASA Resources for Educators** section.

To receive the **ESE Education Newsletter**, a monthly email of the latest NASA ESE education news, programs and resources, visit earth.nasa.gov/education/edreports or send an email to: ese_ed_newsletter@listserv.gsfc.nasa.gov.